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EXAMINER

BIRBACH, NAOMI L

ART UNIT

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1792

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,983	Applicant(s) FLETCHER ET AL.	
	Examiner NAOMI BIRBACH	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04242006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The use of the trademarks Triton BG-10, Triton CF-32, Bayhibit AM, Belclene 650, Synperonic LF/RA30, Synperonic LF/RA260 have been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.
2. Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 10 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 10 contains the trademark/trade names Triton BG-10, Triton CF-32, Bayhibit AM and Belclene 650. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or

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product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a component of a washing detergent and, accordingly, the identification/description is indefinite.

6. Claim 12 contains the trademark/trade names Synperonic LF/RA30 and Synperonic LF/RA260. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a component of a washing detergent and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 2, 6-8, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2003-144372 to Omachi (Machine Translation).

9. As to claims 1 and 6, Omachi discloses a ware washing process including the steps of: (i) washing food utensils (items which are used in the preparation and consumption of food and drink) in a washing cavity of a ware washer with water and detergent (Page 13, Paragraph [0047]) (ii) rinsing the ware in the ware washer with water (Page 14, Paragraph [0052]); and (iii) introducing a biocide in the form of ozone into the washing cavity subsequently to the washing and rinsing of the ware, independently of the water (Page 14, Paragraph [0052]). Omachi teaches that the ozone is flown into the washing cavity by an air style blower, and circulates in the cavity (Page 5, Paragraph [0011]; Page 14, Paragraph [0053]; Claims). Therefore, the ozone is introduced in the gaseous phase and provides a gaseous atmosphere.

10. As to claim 2, Omachi further discloses that the ozone is introduced into the cavity at a normal temperature, which is understood to be room temperature which is about 25 degrees Celsius (Pages 7-8, Paragraph [0026]).

11. As to claim 7, Omachi further discloses that the ozone is generated by means of an ozone generator (Ref. #21) which generates ozone by a blower (Ref. #10) in the style of air to supply ozone to the washing cavity (Ref. #2) of the dishwasher, so it inherently has an outlet in fluid flow communication with the washing cavity (Page 5, Paragraphs [0008], [0010], [0011]; Drawings 3-5).

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12. As to claim 8, Omachi further discloses that the washing may be carried out at a low temperature of 60 degrees or less, which anticipates the claimed range (Page 14, Paragraphs [0051], [0052]).

13. As to claims 13 and 14, Omachi discloses the use of a biocide in form of ozone in a washing process for washing food utensils (ware used in the preparation and consumption of food and drink), the ozone being introducing into the washing cavity in a gaseous phase independently of water so as to provide a gaseous atmosphere thereof in the washing cavity (Page 14, Paragraphs [0052], [0053]).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

16. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

17. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2003-1444372 to Omachi (Machine Translation) as applied to claim 1 above.

18. Omachi is relied upon as discussed above with respect to the rejection of claim 1.

19. As to claim 3, Omachi discloses that the ozone (biocide) can be introduced into the washing cavity at a low concentration (Page 5, Paragraph [0012]). Since concentration directly relates to pH, it is a result-effective variable. Therefore, it would have been obvious to one of ordinary skill in the art to optimize the pH through routine experimentation in order to enhance cleaning and sterilization efficiency (MPEP 2144.05 II).

20. As to claim 4, Omachi discloses that the ozone (biocide) can be introduced into the washing cavity at a low concentration (Page 5, Paragraph [0012]). Since concentration directly relates to pH, it is a result-effective variable. Therefore, it would have been obvious to one of ordinary skill in the art to optimize the pH through routine experimentation in order to enhance cleaning and sterilization efficiency (MPEP 2144.05 II). Omachi discloses that the ozone (biocide) is introduced after rinsing, which

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follows washing (Page 14, Paragraph [0052]). While Omachi does not expressly disclose that the biocide is introduced during a pre-rinse step carried out before the washing step, the selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results. See *In re Burhans*, 154 F.2d 690, 69 USPQ 330 (CCPA 1946).

21. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2003-144372 to Omachi (Machine Translation) as applied to claim 1 above, and further in view of USPN 5,899,215 to Parker, III et al.

22. Omachi is relied upon as discussed above with respect to the rejection of claim 1.

23. As to claim 5, it is understood that the water used in the dishwashing process is exposed to the ozone (biocide) since they are present in the same system. Omachi does not expressly disclose that the water used in the ware washing process and exposed to the biocide is recycled.

24. Parker discloses recycling rinse and/or wash liquid used in a dishwashing process (Col. 1, lines 8-12).

25. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method taught by Omachi to include recycling the water used in the washing process as taught by Parker to reduce water consumption (Col. 1, lines 8-12).

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26. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2003-144372 to Omachi as applied to claim 1 above, and further in view of USPN 6,176,244 to Schouten.

27. Omachi is relied upon as discussed above with respect to the rejection of claim 1.

28. As to claim 9, Omachi does not expressly disclose that the ware washing detergent includes an inorganic alkali, a complexing agent, and at least one surfactant.

29. Schouten discloses a detergent comprising NaOH or KOH (an inorganic alkali), a water conditioning agent like NTA or EDTA, which is a complexing agent as defined by applicant, and at least one surfactant (Col. 7, lines 32-44).

30. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method taught by Omachi to include a detergent as taught by Schouten for the benefit of using a detergent composition known to be effective in a dishwashing process (Col. 1, lines 8-12).

31. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2003-144372 to Omachi and USPN 6,176,244 to Schouten as applied to claim 9 above, and further in view of USPN 3,600,317 to Lintner, USPA 2002/0037821 to Renfrow and USPN 5,399,285 to Kanlun, and as evidenced by USPN 5,874,392 to Halvorson et al.

32. Omachi and Schouten are relied upon as discussed above with respect to the rejection of claim 9.

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33. As to claim 10, Schouten further discloses that the detergent comprises EDTA or NTA, NaOH (caustic soda lye) at about 20-30 wt%, at least 1 wt% surfactants, and the remainder water (Col. 7, lines 4-12, 32-44). As evidenced by Halvorson, sodium hydroxide can soften water (Col. 4, lines 31-32), so it is understood that the water in the detergent is softened. While Schouten discloses using EDTA or NTA, it would have been obvious to one of ordinary skill to use a combination of the two since they are equivalent water conditioning agents (Col. 7, lines 32-44).

34. The combination of Schouten and Omachi does not expressly disclose that the surfactant is Triton BG-10 and Triton CF-32, or that the detergent comprises Bayhibit AM or Belclene 650.

35. Lintner discloses using Triton CF-32 as a surfactant to reduce dishwasher detergent caking (Col. 1, lines 26-31; Col. 2, lines 14-19). Renfrow discloses using Triton BG-10 as a surfactant in a detergent (Page 1, Paragraph [0015]). Kanluen discloses using 1, 2-phosphonobutane-1, 2, 4-tricarboxylic acid as a chelating agent in a detergent (Col. 3, lines 32-44). Applicant discloses that this is the active ingredient in Bayhibit AM or Belclene 650.

36. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method taught by Schouten and Omachi to include Triton CF-32 and Triton BG-10 in the detergent composition as taught by Lintner and Renfrow since they are known to be used as effective surfactants. The selection of a known material based on its suitability for its intended use supports a prima facie obviousness. (MPEP 2144.07).

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37. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method taught by Schouten, Omachi, Lintner and Renfrow to include 1,2-phosphonobutane-1,2,4-tricarboxylic acid in the detergent as taught by Kanluen. One of ordinary skill would have been motivated to add this compound since it is a known chelating agent, which will improve the cleaning power of the detergent (Col. 3, lines 32-44).

38. While the combination of Omachi, Schouten, Lintner, Renfrow and Kanluen does not expressly disclose the % composition as claimed, differences in concentration generally will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration is critical. Therefore, it would have been obvious to one of ordinary skill to optimize concentration through routine experimentation to improve cleaning. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955); MPEP 2144.05 II.

39. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2003-144372 to Omachi as applied to claim 1 above, and further in view of USPN 3,775,330 to Batka et al. and USPN 3,623,988 to Weimer.

40. Omachi is relied upon as discussed above with respect to the rejection of claim 1.

41. As to claim 11, Omachi does not expressly disclose that a rinse aid composition is used during rinsing, comprising at least one alkoxyated alcohol and an acid.

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42. Batka discloses using a rinse-aid composition during rinsing (Col. 1, lines 30-37).

The rinse aid composition comprises an acid (Col. 4, lines 15-24). Batka teaches that the rinse aid comprises a non-ionic, low foaming tenside (surfactant), but does not expressly disclose an alkoxyated alcohol (Col. 2, lines 45-49).

43. Weimer discloses using an epichlorohydrin capped alcohol ethoxylate (alkoxyated alcohol) as a low foaming, non-ionic, caustic, stable surfactant as a rinse aid in automatic dishwashers (Col. 1, lines 13-20; Col. 2, lines 22-36).

44. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method taught by Omachi to include a rinse aid composition as taught by Batka for the benefit of reducing the surface tension of the after-rinsing water so that it drains in a film-like manner from the dishes and leaves no visible deposits, such as lime spots or other impurities (Col. 1, lines 30-37).

45. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method taught by Omachi and Batka to include an alkoxyated alcohol in the rinse aid composition as taught by Weimer. One of ordinary skill would have been motivated to substitute an alkoxyated alcohol in place of the surfactant taught by Batka with a reasonable expectation of success since it is also a nonionic, low foaming surfactant.

46. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2003-144372 to Omachi in view of USPN 3,775,330 to Batka et al. and USPN

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3,623,988 to Weimer as applied to claim 11 above, and further in view of USPN 5,958,855 to Binstock et al.

47. Omachi and Batka are relied upon as discussed above with respect to the rejection of claim 11.

48. As to claim 12, Batka further discloses that the rinse aid composition comprises 10-40% by weight of a water-miscible alcohol such as propanol or isopropanol (propyl alcohol), 0-40% by weight of a lower organic carboxylic acid such as citric acid, and 20-90% by weight of water (Col. 3, lines 65-71; Col. 4, lines 14-24, 35-47). Batka teaches that the citric acid is added if the rinsing is performed with hard water, implying that it is softened by the acid (Col. 4, lines 14-16).

49. Weimer discloses using an epichlorohydrin capped alcohol ethoxylate (alkoxylated alcohol) as a low foaming, non-ionic, caustic, stable surfactant as a rinse aid in automatic dishwashers (Col. 1, lines 13-20; Col. 2, lines 22-36). As defined by the specification, Synperonic is a mixture of alkoxylated alcohols. While the combination of Omachi, Batka and Weimer does not expressly disclose that the alkoxylated alcohol is Synperonic LF/RA30 or Synperonic LF/RA260, Binstock teaches that Synperonic nonionic surfactants are often used in dishwasher detergents. It would have been obvious to one of ordinary skill in the art at the time of the invention to select a Synperonic surfactant as the source of the alkoxylated alcohol since it is known to be used in dishwashing applications. The selection of a known material based on its suitability for its intended use supports a prima facie obviousness. (MPEP 2144.07).

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50. While the combination of Omachi, Batka, Weimer and Binstock does not expressly disclose the % composition as claimed, differences in concentration generally will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration is critical. Therefore, it would have been obvious to one of ordinary skill to optimize concentration through routine experimentation to improve cleaning. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955); MPEP 2144.05 II.

51. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2003-144372 to Omachi in view of USPN 4,076,146 to Lausberg et al.

52. As to claim 15, Omachi discloses a ware washer connectable to a source of water (Page 11, Paragraph [0038]), including a washing cavity (Ref. #2), wherein food utensils (items used in the preparation and consumption of food and drink) may be loaded therein (Page 5, Paragraph [0008]). Omachi teaches that the dishwasher injects water into the washing cavity through a water supply opening, i.e. inlet (Page 5, Paragraph [0008]; Page 11, Paragraph [0038]). The ware washer further includes a biocide introduction means in the form of an ozone generator (Page 5, Paragraph [0008]). The ozone generator (Ref. #21) generates ozone by a blower (Ref. #10) in the style of air to supply ozone to the washing cavity (Ref. #2) of the dishwasher, so it inherently has an outlet in fluid flow communication with the washing cavity (Page 5, Paragraphs [0008], [0010], [0011]; Drawings 3-5). Since the ozone is supplied like air, it is introduced in a gaseous phase to provide a gaseous atmosphere in the washing

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cavity. Omachi teaches that the ozone is introduced independently of water (Page 14, Paragraph [0052]; Page 18, Paragraph [0072]).

53. Omachi discloses that detergent is added to the washing cavity (Page 13, Paragraph [0047], but does not expressly disclose that it is supplied through an inlet.

54. Lausberg discloses a dishwasher having a detergent dispenser with an inlet and outlet to supply detergent to the reservoir (washing cavity) (Col. 1, lines 31-50).

55. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method taught by Omachi to include an inlet for introducing detergent into the washing cavity as taught by Lausberg in order to simplify and regulate the supply of detergent to the washing cavity during a washing process.

Conclusion

56. Applicant's attention is drawn to the fact that the instant claims are directed to at least two distinct inventions – a ware washing process, represented by claims 1-12 (Group I), the use of a biocide, represented by claims 13-14 (Group II), and a ware washer, represented by claims 15-16 (Group III). The restriction requirement is not made at this time; however, it may be imposed later if the claims are amended to introduce additional limitations to each invention, which would require an additional search in each group of claims.

57. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAOMI BIRBACH whose telephone number is

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(571)270-7367. The examiner can normally be reached on Monday-Friday, 8:00am-5:30pm.

58. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Kornakov can be reached on 571-272-1303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

59. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Barr/
Supervisory Patent Examiner, Art
Unit 1792

/N. B./
Naomi Birbach
Examiner, Art Unit 1792
6/11/09